MARY SWORDS DEBAILLON LOUISIANA IRIS SOCIETY

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# NOTES ON
# FALL AND WINTER FOLIAGE OF LOUISIANA IRISES

The importance of vegetative characteristics of Louisiana Irises cannot be overemphasized. The bloom season of these plants is for a relatively short period and thus the garden value of the plant must take into consideration size, shape, color and general appearance of the leaves. In view of the fact that many will be collecting and hybridizing Louisiana Irises very soon now, this paper is presented in the hopes of drawing attention to the foliage characteristics.

The information presented is a brief summary of data taken on 705 separate plants which were planted the previous spring as single rhizomes. Records were made during the months of October, November and December of 1941. Three main types, foliosa and giganticaerulea and fulva, were present in the lot as well as some natural hybrids between them. All plants were grown in the Southwestern Louisiana Institute Iris garden. The beds in which the plants were grown were sunken and kept moist all of the time.

Color records were not taken until after the plants had gone through several frosty nights.

## BRANCHING HABIT OF RHIZOMES

Side rhizomes were counted only if they were large enough to materially change the appearance of the plant. Many were not counted which were visible but very small

One interesting observation was that of all plants considered 65% formed no sizeable side rhizomes by December 31. Only 20% were able to form either one or two rhizomes and 15% formed more than two. One individual formed eight and another fifteen side rhizomes. It was also interesting to note that the fulva type tended to form more side rhizomes than did the other two types. The individuals that formed eight and fifteen respectively were both fulva type.

## LENGTH OF LEAVES

An average length of the three tallest leaves per plant was recorded. As expected the foliosa type as a class was the shortest, the fulva next and the giganticaerulea was the tallest. However, it seems proper to point out here that individuals of fulva composed favorably in height with some of the taller giganticaerulea. Also that some of the giganticaeruleas and fulvas had leaves as short as the average of foliosa leaves. Length of leaf varied from two inches to thirty-six inches. The bulk of all plants measured had leaves between 12 and 24 inches tall. Only three plants were found which had a leaf length of more than 31 inches and only 9 plants were found to have leaves less than 6 inches.

There seemed to be no correlation between leaf height and number of side rhizomes.

## WIDTH OF LEAF

Leaf width was measured at mid-height. It is difficult to generalize much about leaf width on the basis of actual measurements except to point out that the large (Abbeville) fulvas as a group seemed to have a wider leaf than other groups. Leaf width varied from $\frac{1}{4}$ inch to 1 3/8 inches.

Most of the leaves measured between ½ and 7/8 inches wide. There seemed to be a tendency of the wider fulva leaves to droop. It was also noted that leaves formed in the summer and fall were generally narrower than those formed in the early spring.

## COLOR OF LEAF

The "Dictionary of Color" by Maerz & Paul was used as the color standard. Color readings were taken only on mature leaves. Since there was always a difference in color between the two sides of the leaf, the side of the leaf nearest to the outside of the rhizome was always used.

Sixteen different shades of green were found to be present in the 705 plants. The fulva group as a whole tended to be of a paler green, however individuals of fulva as well as the other two groups were found to be pale, medium and dark green. Leaf color within the groups varied to such an extent that type identification can not be made on a color basis. Two of the 24 beds were located in partial shade. Plants in these beds were relatively darker in color than those in the beds located in full sunlight.

Most of the plants were found to fall into one of two color groups. These colors matched Plate 22 - K - 6 and Plate 22 - L - 7 in Maerz & Paul.

## GENERAL VIGOR

An attempt was made to rate plants on their appearance with regard to general vigor. Many factors not previously mentioned came into play and the personal element is probably not among the least of these. A total of 10 points was given to the plant appearing to be the most vigorous. The fulva group seemed to have a slight edge over giganticae-rulea on general vigor. This may have been due to the fact that most

of the fulvas were of the (Abbeville) type which is unusually vigorous.

The foliosas did not present a very vigorous appearance as a group and did so rarely as individuals.

Ten of the most promising plants were chosen on the basis of fall vegetative characteristics. They are listed on the enclosed chart.

## SUMMARY

1. Vegetative characteristics are very important and they should be considered when selecting a plant for either garden use or for use as breeding stock.

2. The number of side rhizomes formed on a mother rhizome varies almost as much within any type as it does between types. Most mother rhizomes form o, 1 or 2 side rhizomes between late spring and December 31 at Lafayette, Louisiana. A very small per cent of mother rhizomes will form more than two side rhizomes. As many as fifteen have been counted.

3. Leaf length of foliosa type is generally the shortest, fulva next shortest and giganticearulea tallest. Individuals of these groups may not follow this order.

4. Leaf width is quite variable within all three groups. The large type (Abbeville) fulvas as a group have the widest leaves. Leaves that were formed in summer and fall seemed to be narrower than leaves formed just prior to the bloom period.

5. There seems to be very strong evidence that vegetative characteristics for any of the three types observed vary sufficiently to warrant rigid selection when choosing plants for garden or breeding stock.

VEGETATIVE CHARACTERISTICS OF

TEN MOST PROMISING PLANTS ON JANUARY 1, 1942

| Type | Plant No. | Color | Height of Leaf | Width of Leaf | No. of Side Rhizomes | General Vigor |
|---|---|---|---|---|---|---|
| **G | B-1-8 | P122-L-8 | 36" | 1" | 1 | 10 |
| G | B-1-9 | P122-L-6 | 30" | 1 1/8" | 3 | 9 |
| G | B-1-2 | P122-L-7 | 26" | 7/8" | 0 | 9 |
| *F | A-1-6 | P122-L-6 | 20" | 1" | 3 | 9 |
| F | B-6-9 | P122-K-6 | 22" | 5/8" | 1 | 9 |
| G | C-1-43 | P122-L-8 | 30" | 7/8" | 0 | 8 |
| F | A-2-9 | P122-L-8 | 16" | 11/16" | 9 | 7 |
| F | A-3-3 | P122-K-6 | 20" | 5/8" | 15 | 7 |
| F | B-6-2 | P122-L-5 | 23" | 1 1/8" | 3 | 8 |
| F | A-4-10 | P122-K-7 | 21" | 1" | 3 | 7 |

** Gc = giganticaerulea

* F = fulva